

# PATENT COOPERATION TREATY

TRANSLATION

From the  
INTERNATIONAL SEARCHING AUTHORITY

PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

Date of mailing (day/month/year) **See form PCT/ISA/210**

Applicant's or agent's file reference

**306475**

**FOR FURTHER ACTION**

See paragraph 2 below

International application No.

**PCT/EP2004/052636**

International filing date (day/month/year)

**22.10.2004**

Priority date (day/month/year)

**03.11.2003**

International Patent Classification (IPC) or both national classification and IPC

**F16K31/06, F16K27/02, F02M51/06**

Applicant

**ROBERT BOSCH GMBH**

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/EP

Authorized officer

Facsimile No.

Telephone No.

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Box No. I	Basis of this opinion
1.	<p>With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.</p> <p><input type="checkbox"/> This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).</p>
2.	<p>With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:</p> <p>a. type of material</p> <p><input type="checkbox"/> a sequence listing</p> <p><input type="checkbox"/> table(s) related to the sequence listing</p> <p>b. format of material</p> <p><input type="checkbox"/> in written format</p> <p><input type="checkbox"/> in computer readable form</p> <p>c. time of filing/furnishing</p> <p><input type="checkbox"/> contained in the international application as filed.</p> <p><input type="checkbox"/> filed together with the international application in computer readable form.</p> <p><input type="checkbox"/> furnished subsequently to this Authority for the purposes of search.</p>
3.	<p><input type="checkbox"/> In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.</p>
4.	<p>Additional comments:</p>

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Box No. II

Priority

1. ☒ The following document has not yet been furnished:
- ☒ copy of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(a)).
  - ☐ translation of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(b)).
- Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date in the claimed priority date.
2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43bis.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.
3. Additional observations, if necessary:

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Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement															
1. Statement	<table><tr><td rowspan="2">Novelty (N)</td><td>Claims <u>2, 3</u></td><td>YES</td></tr><tr><td>Claims <u>1, 4-7</u></td><td>NO</td></tr><tr><td rowspan="2">Inventive step (IS)</td><td>Claims _____</td><td>YES</td></tr><tr><td>Claims <u>1-7</u></td><td>NO</td></tr><tr><td rowspan="2">Industrial applicability (IA)</td><td>Claims <u>1-7</u></td><td>YES</td></tr><tr><td>Claims _____</td><td>NO</td></tr></table>	Novelty (N)	Claims <u>2, 3</u>	YES	Claims <u>1, 4-7</u>	NO	Inventive step (IS)	Claims _____	YES	Claims <u>1-7</u>	NO	Industrial applicability (IA)	Claims <u>1-7</u>	YES	Claims _____	NO
Novelty (N)	Claims <u>2, 3</u>		YES													
	Claims <u>1, 4-7</u>	NO														
Inventive step (IS)	Claims _____	YES														
	Claims <u>1-7</u>	NO														
Industrial applicability (IA)	Claims <u>1-7</u>	YES														
	Claims _____	NO														
2. Citations and explanations:	<p><b>Independent claim 1</b></p> <p>1. The subject matter in claim 1 of the present application cannot be regarded as novel for the following reasons (PCT Article 33(2)):</p> <p>1.1. The following features in claim 1 are already known, for example from the closest prior art D1: US 4621788:</p> <p>valve 10 for controlling a fluid, especially for controlling a gas, said valve comprising a valve housing 14 having a housing sleeve (48,50) and an electromagnetic actuating unit 30 for an armature 28 that is guided in an axially displaceable manner and co-operates with a valve seat 26 formed on a valve plate 24, such that a fluid flow through outlet openings 26 of the seat plate 24 can be controlled, wherein the armature 28 is guided on an armature sleeve 16 arranged in the housing sleeve (48,50).</p> <p>(D1: column 1, lines 6 to 19; column 2, lines 20 to 65; and figures 1 and 2).</p>															

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The subject matter of claim 1 is therefore not novel (PCT Article 33(2)).

- 1.2. The features in claim 1 are also already known from documents D2: US 6089467 (column 4, line 64 to column 6, line 56, and figures 1 to 9); D3: US 4331317 (column 2, line 20 to column 4, line 30, and figures 1 to 4); D4: US 5232167 (column 2, line 20 to column 5, line 56, and figures 1 and 2); D5: DE 19503736 (column 1, lines 33 to 66, and figures 1 to 5); D6: US 6422488 (column 4, line 11 to column 10, line 6, and figures 1 to 10); D7: US 5197672 (column 1, line 67 to column 5, line 9, and figures 1 to 4); and D8: EP 0661444 (column 3, line 46 to column 10, line 6, and figures 1 to 7).

**Dependent claims 2 to 7**

2. Dependent claims 2 to 7 do not contain any features which, in combination with the features of any claim to which they refer back, satisfy the PCT inventive step requirements, because the features in these dependent claims merely concern simple and obvious measures that a person skilled in the art would routinely take on the basis of familiar considerations and that do not constitute an inventive step. The additional features of these dependent claims are also known in part from the search report citations, as described below.

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- 2.1. The additional features of dependent claim 4 are already known from D1 (figure 1).
- 2.2. The additional features of dependent claims 5 to 7 are already known from D2 (figure 2).